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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,653

04/04/2006

Richard Kulak

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EXAMINER

KRUER, STEFAN

ART UNIT

PAPER NUMBER

3654

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,653	Applicant(s) KULAK ET AL.	
	Examiner Stefan Krueer	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5 - 10, 12 - 14 and 16 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5 - 10, 12 - 14 and 16 - 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5 – 9, 10, 12 – 14 and 16 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (5,289,902, US Patent of JP-05116869) in view of Hollowell et al (5,368,132).

Re: Claims 1, 3 and 5 – 9, Fujita discloses a roller guide device (Fig. 2) for use in an elevator system, comprising:

- A base (8),
- At least one roller (10) supported by the base such that the roller is rotatable about a roller axis (11) and moveable to the base in at least one direction perpendicular to the roller axis,
- A damper (20) that has a selectively variable stiffness and dampens the relative movement of the roller, the damper comprising a fluid (22) having a selectively variable viscosity for varying the stiffness of the damper; and
- A controller (25, Fig. 3) that automatically increases the stiffness of the damper when an associated elevator car (5) experiences high amplitude, low frequency motion and decreases the stiffness of the damper when the associated car experiences low amplitude, high frequency motion (Col. 7, Lines 3 – 13 and Col. 8, Lines 53 – 60),
- An elevator car motion indicator (24) in communication with the controller and wherein the controller changes the damper stiffness responsive to a detected level of motion (Col. 4, Line 9),
- Wherein the damper fluid comprises a magneto-rheological fluid (Col. 3).

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- A field generator (23) that generates a field that changes a viscosity of the magneto-rheological fluid (Col. 4, line 1),
- The controller (25) controls the field generator, and
- An indicator (24) that provides an indication of an elevator car vibration to the controller and wherein the controller controls the damper stiffness based upon an amount of vibration; however, though

Fujita reviews his controller automatically increasing and decreasing the stiffness of his damper when an associated elevator car is experiencing varying amounts of movement, Fujita is silent with respect to his controller automatically increasing the stiffness of the damper when an associated elevator car is at a landing.

Attention is directed to Hollowell et al who teach their controller (24) automatically increasing the stiffness (magnetic field) of their damper (59, electromagnetic flux, Fig.'s 3, 5 and 6) when an associated elevator car (13) is at a landing and decreasing the stiffness of their damper when their elevator car is moving (Col. 3, L. 9 – 17) for the feature of affording greater stability when passengers are embarking/disembarking the elevator car.

It would have been obvious to one of ordinary skill in the art to modify the reference of Fujita with the teaching of Hollowell et al for ergonomics and marketability.

Re: Claims 10 and 12 – 13, Fujita discloses:

- An elevator system (Fig. 1),
- a car frame (5a),
- At least one roller (10) supported for vertical movement with the frame, and rotatable movement as well as lateral movement relative to the frame,
- A selectively variable stiffness damper (20) that dampens the relative movement of the roller, the damper comprising a fluid (22) having a selectively variable viscosity for varying the stiffness of the damper;
- A controller (25, Fig. 3) that automatically increases and decreases the stiffness of the damper in response to detected amplitudes and frequencies of vibrations of said elevator car frame;

- An vibration detector (24) that provides an indication of a level of car frame vibration to the controller and wherein the controller controls the damper stiffness based upon the indication of the level of car frame vibration; and
- Wherein the damper fluid comprises a magneto-rheological fluid (Col. 3); however

Fujita is silent with respect to his controller automatically increasing the stiffness of the damper when an associated elevator car is at a landing.

Attention is directed to Hollowell et al who teach their controller (24) automatically increasing the stiffness of their damper (59) when an associated elevator car (13) is at a landing and decreasing the stiffness of their damper when their elevator car is moving (Col. 3, L. 9 – 17) for the feature of affording greater stability when passengers are embarking/disembarking the elevator car.

It would have been obvious to one of ordinary skill in the art to modify the reference of Fujita with the teaching of Hollowell et al for ergonomics and marketability.

Regarding Claims 14 and 16 - 22, the components comprising the device of Claims 10 and 12 - 13 would necessarily have to interact in order for the device to function. It would have been obvious to perform all the method steps of claims 10 and 12 - 13 when using the device of Fujita as taught by Hollowell et al, in a usual and expected fashion, in as much as the method claims recite no limiting steps beyond using each of the components.

With respect to **Claims 20 - 21**, Fujita discloses wherein the controller receives information from a machine controller (24) regarding an extent of motion of their elevator car for which the controller increases or decreases the stiffness of the damper responsive to the information; however, Fujita is silent with respect to the execution of his controller when his elevator car is at stationary at a landing.

Attention is directed to Hollowell et al who teach their controller automatically increasing the stiffness of their damper and decreasing the stiffness of their damper when their elevator car is stationary (at a landing) and moving, respectively, for the feature of user comfort.

It would have been obvious to one of ordinary skill in the art to modify the reference of Fujita with the teaching of Hollowell et al for ergonomics and marketability.

With further respect to Claim 17, Fujita discloses a plurality of rollers and associated dampers (Fig. 1).

With further respect to Claims 19 - 22, in reference to the claim language referring to receiving information from a machine controller, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Response to Arguments

Applicant's arguments as filed 20 May 2008 with respect to **Claims 1, 10, 14 and 18** have been fully considered but they are not persuasive.

The reference of Fujita discloses a device capable of providing the feature of the instant invention - automatically increasing the stiffness of the damper when the elevator car is stationary at a landing - although the reference of Fujita is silent with respect to his controller executing such.

Hallowell et al reviews the prior art of damping, including devices similar to that of the reference of Fujita – guide roller with dashpot and spring - however Hallowell teaches the use of electromagnetic guides that follow the rails and the selectively directed electromagnetic force applied to “lock” the elevator car at a landing, as noted by the applicant, “...to hold it against jostling forces of passengers entering and leaving the cab” Therefore, Hallowell teaches the concept of a controller that automatically increases a stiffness of a damper when an elevator car is at a landing.

Hallowell is not cited for teaching a device that can necessarily operate the device of Fujita and Fujita, in order to be combined with Hallowell, must not be capable

of generating a force of Hallowell; rather, Hallowell teaches the concept of automatically increasing a resistance to lateral motion upon reaching a landing in anticipation of the forces/vibrations generated by disembarking/embarking passengers, wherein said concept can be applied to the controller of Fujita that continuously monitors and counteracts the detected vibrations incurred upon the elevator car - irrespective of the elevator car being stationary or in motion.

The prior art previously made of record for pertinence to applicant's disclosure is cited again below.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fuller et al (6,216,824) is cited for reference of a machine controller that controls whether the car frame is stationary at a landing or moving, the controller receiving information from the machine controller indicating whether the car frame is stationary at a landing or moving and wherein the controller automatically increases or decreases the stiffness responsive to the information, for feature of enhanced responsiveness to oscillations (Col. 1, L. 38 – Col. 2, L. 9).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571.272.6856. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/Stefan Kruer/

Examiner, Art Unit 3654

29 July 2008

/Peter M. Cuomo/

Supervisory Patent Examiner, Art Unit 3654